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ABSTRACT

A total of 160 high school students in the Pitt County and the Greenville city school systems participated in two summer institutes which were conducted to alter the attitudes and interests of students regarding vocational education. Participants for the institutes were chosen from the top two academic quartiles, after which an experimental and control group were established. The experimental group participated in a specially designed four-week institute involving many kinds of exposure to vocational education. The control group did not receive any treatment. Followup studies were conducted on both groups to determine the type of postsecondary education institution that participants chose to attend. Student attitudes and interests did change, more so for males than for females. Fourteen percent of the total experimental group enrolled in a technical institute, community college, or trade school compared to five percent of the control group. (Author/VA)

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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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SUMMER INSTITUTE FOR HIGH SCHOOL STUDENTS: A RESEARCH PROJECT IN PRE-VOCATIONAL EDUCATION

(VT-102-180)

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ABSTRACT

The award of a research grant by the Occupational Research Unit to Pitt Technical Institute has enabled the Pitt Technical Institute to conduct two summer institutes involving a total of 160 rising high school seniors in the Pitt County and the Greenville City School systems.

Problem

The problem researched concerned the attitudes and interests of students regarding vocational education. Specifically, would a pre-vocational training institute for students between their junior and senior years of high school alter their attitudes and interests toward vocational education to the extent that a technical institute, community college, or trade school would become their avenue for post-secondary education?

Objective

The project objective was to foster a change of attitude and interest in the high school students from the top two academic quartiles as they relate to vocational education, thereby increasing the number of enrollees from this group.

Procedure

From the top two academic quartiles, a group of sixteen students (eight experimental and eight control) were chosen from the junior class

of 1972 at each of the five high schools in Pitt County and Greenville, North Carolina. This technique was repeated with the junior class of 1973 for the second year of the project. For both years of the project a total of 160 students (eighty experimental and eighty control) were involved.

The Strong Vocational Interest Blank was administered tc both groups in the spring and fall of each year as a pretest and post test. The experimental group was brought on campus to participate in a specially designed four weeks summer institute involving many kinds of exposure to vocational education. The control group did not receive any treatment. Follow-up studies were conducted on both groups to determine the type of post-secondary educational institution the participants chose to attend.

Conclusion

Student attitudes and interests did change, more so for males than for females. A large majority of the experimental students felt that every high school student should be given the opportunity to explore vocational areas. Fourteen percent (eleven students) of the total experimental group did enroll in a technical institute, community college, or trade school as opposed to five percent (four students) of the control group. It appears that the summer institute did have some significant effect on the participants' post-secondary school choice.

From the results obtained by testing and written comments from the participants, it can be generalized that secondary school programs

should be restructured to permit more students to know themselves better and to identify more specifically their areas of interest in regard to their life's career.

ACKNOWLEDGEMENT

A research project which involves students from every high school in the city and county system involves the cooperation of several individuals. In addition to Pitt Technical Institute personnel, special appreciation is extended to the following for the work they have done in the research project.

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Department of Public Education

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State Senator & Chairman
Board of Trustees
Pitt Technical Institute

Dr. Charles Holloman
Vice President
Department of Community Colleges

Mr. Bob Martin
Chairman
State County Commissioners

Mr. Harry Leslie
Manager, Greenville Plant
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Mr. Arthur S. Alford
Superintendent
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Dr. C. C. Cleetwood
Superintendent
Greenville City Schools

Mrs. Kathryn Lewis
Director of Guidance
Pitt County Schools

Mr. Robert Alligood
Principal
J. H. Rose High School

Mr. Russ Cotten
Principal
Farmville Central High School

Mr. Bill Sneed
Personnel Director
Greenville Plant
Burroughs Wellcome

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Pitt County Schools

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North Pitt High School

Mr. David Barnhill
Counselor
J. H. Rose High School

BACKGROUND: THE PROBLEM

Pitt Technical Institute continually faces the problem of not being able to recruit high school graduates of significant quantity from the top two academic quartiles. The reasons for this fact are numerous.

First, at the root of the problem is a prevailing attitude that vocational education is a fine thing, but it is designed for "somebody else's children." This attitude is shared by many people from all walks of life, especially by school administrators and teachers who design and schedule the secondary school programs and by the parents of the students in both the private and public school sectors.

Second, the notion seems to exist that the only good education is obtained in a four-year institution. This attitude is reflected so frequently by adults when they say, "I want you to go to college and get a degree so you can be a success."

Third, the rigidity of secondary school programs prevents the flexibility that will permit a student to explore various areas of the world of work. Movement into and out of vocational and academic programs should be possible by all students, but such is rarely the case. Students are subjected to a tracking system that carries each student down a single path that causes many interest areas to be closed to investigation.

Fourth, the problem is further complicated as a result of vocational education information being misued by teachers and counselors.

This is particularly in evidence when information concerning the potential that exists in many areas of the world of work is given only to selective groups of low academic achievement and not to groups of high academic achievement.

These four factors are representative of the many that exist. The student has had very little if any imput into the educational program that provides a foundation for his future. His attitude regarding education is not formed on the basis of self-exploration, but is, instead, shaped by the societal system.

Simply stated, the problem centers around two questions: First, how do you change the student's attitude regarding vocational and technical education? Second, how do you recruit more students from the two top academic quartiles? The answer may lie in a specially designed program.

If the assumption that many upper ability students do not choose vocational or technical education in the post-secondary area due to attitude is valid, then it is justifiable to initiate some research to determine if attitudes can be changed. Assuming that attitudes can be changed and that one is permitted to make choices freely, vocational and technical education programs will be selected by the more academically talented students. These assumptions if proved to be valid would not only increase enrollments in vocational and technical programs, but would also provide a very strong directive to secondary school personnel that their programs need to be made more flexible for the students who are forming their future goals. The present system seems to foster more frustration than decision making.

In reviewing the literature relevant to the study of student attitudes and interests regarding vocational education, the only significant work that was found pertaining to exploration programs was that being conducted by the North Dakota State School of Science under a grant from the North Dakota State Board for Vocational Education. This project in career development was an exemplary project and was open primarily to rising high school seniors. However, if space was available, graduated seniors could also enroll in one of the two five-week summer sessions. An exchange of correspondence with the North Dakota project director indicated that recruiting for their summer institute was a problem. However, no mention was made that student attitude was a problem.

Other literature reviewed points to the fact that recruiting the more academically talented student for vocational and technical programs is a problem nationally. In another specific instance, Florida Junior College has adopted the "hard sell" approach through the use of "super salespersons." Their objective is to overcome the "need for a four-year degree" attitude that has been fostered by parents, teachers, administrators and labor leaders.

PREMISE

Therefore, if students are making decisions based on the prevailing attitudes that permeate society pertaining to vocational and technical education and also on the manner in which secondary school programs are structured, then research designed to effect attitudinal change is important and necessary.

The assumption upon which the summer institute was based was that if all students are given a meaningful exposure to vocational and technical education on the secondary level, more of them will enroll in these programs in a post-secondary institution.

OBJECTIVES

The major objectives of the research project were:

1. To create and stimulate in the student a more desirable attitude and understanding relative to vocational and technical education.
2. To develop better self-understanding through testing and counseling.
3. To enroll more students from the top academic quartiles in both secondary and post-secondary vocational education programs.

From the three major objectives the overall hypothesis was formed. The hypothesis to be tested was: That the exposure of upper ability level rising high school seniors to a concentrated vocational education summer institute would influence their attitudes significantly enough to result in their choosing technical-vocational education rather than university education after high school graduation.

PROCEDURE

Since the proposed project involved a selected group of juniors from the public schools, it was necessary to obtain the

endorsement of the Pitt County Schools and the Greenville City Schools superintendents (see Appendix C). Both superintendents enthusiastically endorsed the project. The principals and counselors were, then, informed of the project and its endorsement by the superintendents.

Since the principals and in a major way the counselors would be involved during the project's entire calendar, a special meeting of these people was held at Pitt Technical Institute in order that a detailed explanation and a question-and-answer session could be effected regarding the project. All the secondary schools in Pitt County (four county and one city) were represented. This group unanimously endorsed the project. Prior to being endorsed by the representative group, however, the procedural aspects of the project were outlined and explained.

The design of the research project centered around a four-weeks summer institute. Activities were planned in a manner to facilitate accomplishing the overall objective of positively stimulating student attitudes toward vocational and technical education.

Students from the five area high schools were involved in the project (Ayden-Grifton, D. H. Conley, North Pitt, Farmville Central, and J. H. Rose). Sixteen students from each school were randomly selected to participate, with eight being in an experimental group and eight being in a control group. The total involvement consisted of eighty students of which forty were experimental and forty were control.

During the month of May, the Strong Vocational Interest Blank was administered as a pretest to both groups in order to establish

an attitudinal bench mark or data base from which change could be measured. After the pretest, no additional contact was made with the control group until the post-test was administered to both groups the following October.

Early in June, the experimental group was brought on campus to begin the four-weeks summer institute. The design of the institute consisted of four major areas: (1) Introduction, (2) First area of in-depth study, (3) Second area of in-depth study, and (4) Evaluation.

INTRODUCTION

The introductory session covered a period of two and one-half days. Initially this seemed a little long, but in support of the assumption that these selected students had received very little exposure to vocational education, it seemed appropriate that the department heads present a survey of their respective departments. This orientation enabled the students at a later time to select the two areas of indepth study which appealed to them the most.

Additional information was presented to the institute participants through films; by speakers from industry, state and county educational offices, and state and county government; and by Pitt Technical Institute personnel representing extension services and institutional support areas.

After the introductory sessions were completed, each student selected two areas of concentration in which he would evenly divide the remaining afternoons in the institute. The students were told that they would be permitted to change their area of indepth

concentration if they wished to do so. Choices were made from the following areas which in some cases represent a clustering of programs having many commonalities:

1. Agriculture
   - A. Agricultural Business
   - B. Agricultural Chemicals
2. Air and Water Resources Technology
3. Automotive Mechanics
4. Business Administration and Accounting
5. Commercial Art and Graphic Design
6. Drafting
   - A. Architectural
   - B. Mechanical
7. Electronic Data Processing
8. Electronics
   - A. Electronic Technology
   - B. Electronic Servicing
9. Health Occupations
   - A. Mental Health Associate
   - B. Practical Nurse Education
10. Machinist
11. Police Science
12. Secretarial

For the morning sessions, the group was sub-grouped by tens to form four groups. It was explained that each group would follow a pre-arranged rotating schedule each morning that would permit each student to audit up to eight different classes for three days each including vocational, technical, and related courses and involving classroom, shop, lab, and field trip experiences.

First Area of In-depth Study

Of the sixteen remaining days of the institute, the participants spent eight afternoons in their first choice for an area of concentration. Their experiences involved a general survey of that particular vocational area, the skills both mental and manual that are needed to successfully pursue that vocation, the potential that exists for advancement in both position and salary, the place that particular vocation occupies in the industrial and business world, and then, of great importance, the opportunity for "hands-on" experiences. (An example of "hands-on" is that the machinist students machined and assembled a hammer with a removable head.)

Second Area of In-depth Study

During the remaining eight days of the institute, the students pursued their second area of concentration. The structure and conduct of the second eight-day session were similar in all aspects to that of the first session.

Evaluation

The last day of the institute was devoted to student evaluation which involved everyone's completing a graduated response instrument which called for a value response to several items to the degree the student felt would reflect his opinion. Also, each participant completed a questionnaire designed to obtain information pertaining to post-secondary school plans and subject area

exposure in high school. On a voluntary basis, students were asked to write a brief opinion statement of the summer institute. (See Appendix "A" for examples.)

In October after the public schools were completely settled, the post test was administered in each school to the students that participated as experimental and control. The test answer sheets were sent to Educational Testing Service, Princeton, New Jersey, for scoring and card punching.

This research project received additional funding for replication with another group of students similar to the first group. The first group of students received treatment during the spring, summer, and fall of 1972. The second group received treatment during the same time of the year in 1973.

Treatment for the second group was the same as the first group except that morning auditing sessions were omitted, due mainly to a reduction in stipend for each student.

RESULTS

The results of the two summer institutes indicate that the major objective was accomplished, that is that a selected group of students from two upper academic quartiles did have a positive change to occur in their attitudes regarding vocational and technical education. This finding is supported by students' evaluation as well as by the statistical treatment given to the pretest and post test results of the first group. Due to a house cleaning error in the early summer of 1974, the test results on the second

group were erroneously destroyed. This was not discovered by the project director until preparations for the final report were being made. Student evaluations are available and they are similar to those of the first group. Thus the inference is that a positive change in attitude occurred among the second group also.

The results of the students' evaluation of the summer institute are presented on the following two pages. With the exception of item one, the response given by the students is similar, that is the institute did bring about a positive attitudinal change in the experimental group for both years.

Additional Information Questionnaire

When asked if they had previously had the opportunity to explore the areas included in the institute, more than half of the girls said "no", while less than half of the boys said "no". Therefore, less than half of the girls in the experimental group had explored vocational areas and more than half of the boys had explored the various areas. These figures seem to indicate that more vocational exploration opportunities are available to boys than to girls. Also, that if given the opportunity additional girls would explore the vocational areas more. The results of the student evaluation point this trend up rather strongly.

Statistical Analysis

As previously explained, a statistical analysis is available on only the summer of 1972 group. This analysis was designed to

STUDENT EVALUATION

1972		1973 *			
BOYS	GIRLS	BOYS	GIRLS	TOTAL	ITEMS
					1. I found that:
0	0	0	0	0	a. I learned nothing I did not know b
0	0	0	0	0	b. I learned little.
6	3	11	15	35	c. I learned some.
16	15	7	1	39	d. I learned a great deal.
					2. My perception of vocational education
0	0	0	0	0	a. did not change.
3	1	2	1	7	b. changed a lot
14	13	15	15	57	c. has changed a lot.
5	4	1	4	14	d. is completely different now.
					3. My appreciation for vocational educati
1	0	1	1	3	a. has not changed.
4	1	3	3	11	b. has changed little.
12	12	12	9	45	c. has changed a lot.
5	5	2	7	19	d. is completely different now.

*Although forty students were scheduled in 1973, only thirty-eight participated in the experimental group.

STUDENT EVALUATION

S	1973 * BOYS	GIRLS	TOTAL	ITEMS
				1. I found that:
	0	0	0	a. I learned nothing I did not know before.
	0	0	0	b. I learned little.
	11	15	35	c. I learned some.
	7	1	39	d. I learned a great deal.
				2. My perception of vocational education
	0	0	0	a. did not change.
	2	1	7	b. changed a lot
	15	15	57	c. has changed a lot.
	1	4	14	d. is completely different now.
				3. My appreciation for vocational education
	1	1	3	a. has not changed.
	3	3	11	b. has changed little.
	12	9	45	c. has changed a lot.
	2	7	19	d. is completely different now.

students were scheduled in 1973, only thirty-eight participated in the
roup.

1972		1973			
BOYS	GIRLS	BOYS	GIRLS	TOTAL	ITEMS
					4. I will probably discuss a vocational area with a principal or teacher
6	2	1	2	11	a. not at all more than before.
3	4	8	5	20	b. a little more than before.
10	7	7	9	33	c. somewhat more than before.
3	5	2	4	14	d. a lot more than before.
					5. Considering my previous vocational counseling, th
1	0	7	4	12	a. added little to my knowledge of vocations.
21	18	11	16	66	b. added much to my knowledge of vocations.
					6. My attitude regarding future students having this
0	0	0	0	0	a. I don't think they should.
3	4	3	1	11	b. It might be of some value.
3	1	3	9	16	c. I think they should have the same experience.
3	7	8	6	24	d. I definitely feel all students should have th
13	6	4	7	30	e. This experience should be incorporated into a programs.
					7. I think informing students of the different vocat having them actually do some of the work
0	0	0	0	0	a. has less value than movies.
1	0	0	0	1	b. has the same value as movies.
2	7	7	6	22	c. is better than movies.
18	11	11	14	54	d. is far superior than movies.

1973 BOYS	1973 GIRLS	TOTAL	ITEMS
			4. I will probably discuss a vocational area with a counselor/ principal or teacher
1	2	11	a. not at all more than before.
8	5	20	b. a little more than before.
7	9	33	c. somewhat more than before.
2	4	14	d. a lot more than before.
			5. Considering my previous vocational counseling, this program has
7	4	12	a. added little to my knowledge of vocations.
11	16	66	b. added much to my knowledge of vocations.
			6. My attitude regarding future students having this experience is:
0	0	0	a. I don't think they should.
3	1	11	b. It might be of some value.
3	9	16	c. I think they should have the same experience.
8	6	24	d. I definitely feel all students should have this experience.
4	7	30	e. This experience should be incorporated into all educational programs.
			7. I think informing students of the different vocational areas by having them actually do some of the work
0	0	0	a. has less value than movies.
0	0	1	b. has the same value as movies.
7	6	22	c. is better than movies.
11	14	54	d. is far superior than movies.

measure the level of accomplishment of the first objective: To create and stimulate a more desirable attitude and understanding relative to vocational and technical education.

Based upon student responses to the items on the Strong Vocational Interest Inventory Blank, which was administered as a pretest and post-test, a statistical analysis was performed.

For the males, the analysis indicates that the institute treatment did have the effect of increasing interest toward vocational education for the experimental group. That is, that there was significant difference between the experimental and control groups between the two administrations of the Strong Vocational Interest Blank.

For the females, the difference between the experimental and control groups between the two administrations of the Strong Vocational Interest Blank was not enough to be significant. However, this does not mean that the difference is not important. According to Davis and Rosenberg, there is a distinction between practical and statistical significance. Although the difference is slight, it should not be left as it is. No statistic has value in and of itself. It is imperative that any and all insights that might be provided by the statistic be discovered.

In this case, the female sample size was small. In addition, there were not as many standard scores on the female form of the test relating to vocational and technical education as there were for males. Also, there were not as many female interest areas in the summer institute as there were for males. These factors together may have affected the fact the difference between the

experimental and control groups was not statistically significant.

Student Evaluation

The student evaluation instrument was designed to measure the accomplishment of the second objective: To develop self-understanding through testing and counseling. Responses recorded on all items indicate that in the student's mind his attitude regarding vocational and technical education has undergone a positive change. Response to item four on the evaluation instrument indicates that these students will seek more counseling regarding their interests and aptitudes before deciding upon their life's vocation. In fact, twenty students said they would seek counseling about vocational areas "a little more than before," thirty-three would seek counseling "somewhat more than before," and fourteen would seek counseling "a lot more than before." Regarding item number five, sixty-six participants said that the institute had "added much to [their] knowledge of vocations."

Student Follow-Up

Actual enrollment by the participants in a post-secondary institution will determine the degree of accomplishment of the third objective: To enroll more students from the top academic quartiles in vocational education in both the secondary and post-secondary institutions. Only out of response to student request and the findings of research that secondary school programs are restructured

to accomodate additional students from all academic levels can this area of the objective be evaluated for accomplishment.

A follow-up of students' post-secondary educational activities has been made. The students participating in the institute did the following after graduation from high school:

1972 Group - Experimental

NAME	FALL 1973	FALL 1974
Kennon Powell	UNC - Chapel Hill	East Carolina University
Charles Tyson	Wake Forest	Wake Forest
Maurice Sheppard	UNC - Chapel Hill	UNC - Chapel Hill
Steven Mitchell	UNC - Chapel Hill	UNC - Chapel Hill
Wandra Elks	UNC - Chapel Hill	UNC - Chapel Hill
Wanda Matthews	N. C. A. & T.	N. C. A. & T.
Beth Lambeth	East Carolina University	East Carolina University
Vivian Floyd	East Carolina University	East Carolina University
Dewanda Davis	N. C. Central University	N. C. Central University
Mary Ann Joyner	Pitt Technical Institute	Working
Janice Tyson	St. Augustine	Married
Don Joyner	East Carolina University	East Carolina University
Greg Taylor	U. S. Army	U. S. Army
Marshall Thompson	East Carolina University	East Carolina University
Carl Turnage	UNC - Chapel Hill	UNC - Chapel Hill
Tony Tyson	N. C. A. & T.	N. C. A. & T.
Randy Avery	East Carolina University	East Carolina University
Rebecca Baker	Working	Working

1972 Group - Experimental

NAME	FALL 1973	FALL 1974
Katrina Brown	Home	Home
Elizabeth Byrd	U. S. Army	U. S. Army
Carolyn Daniels	Home	Home
Robert Hines	Pitt Technical Institute	Graduated - Working
Norman Marable	U. S. Army	U. S. Army
James Thomas	St. Augustine	St. Augustine
David Harrison	East Carolina University	East Carolina University
Darrell Cogdell	N. C. Central University	N. C. Central University
Charles Young	UNC - Chapel Hill	UNC - Chapel Hill
Jimmy Nelson	UNC - Chapel Hill	UNC - Chapel Hill
Brenda Bullock	Peace College	East Carolina University
Ellen Heath	Meredith	Meredith
Linda Corey	UNC - Chapel Hill	UNC - Chapel Hill
Johnny Edwards	Worked	East Carolina University
Sherrian Brown	N. C. Central University	N. C. Central University
Jerry Griffin	U. S. Army	U. S. Army
Mickey Harris	East Carolina University	Working
Jessica Fleming	St. Mary's College	St. Mary's College
Jane Whitley	East Carolina University	East Carolina University
Wanda Wheless	East Carolina University	East Carolina University
Horace Tripp	UNC - Chapel Hill	UNC - Chapel Hill
Raymond Eubanks	National Guard	Lenoir Community College

1972 Group - Control

NAME	FALL 1973	FALL 1974
Fawn Staton	Hampton Institute	Hampton Institute
Jean Mills	UNC - Chapel Hill	UNC - Chapel Hill
Nancy Martin	Duke University	Duke University
Kimberly Simpson	East Carolina University	East Carolina University
Thomas Foreman	UNC - Chapel Hill	UNC - Chapel Hill
John Allen Tucker	Davidson College	Davidson College
George Price	N. C. Central University	U. S. Army
Larry White	East Carolina University	East Carolina University
Cathy Buck	East Carolina University	East Carolina University
Madge Dews	East Carolina University	East Carolina University
Melvin Edwards	U. S. Army	U. S. Army
Ronald Jones	St. Augustine	St. Augustine
Joyce King	Pitt Technical Institute	Pitt Technical Institute
Michael Roberson	East Carolina University	East Carolina University
Linda Cannon	East Carolina University	East Carolina University
Franklin Tripp	Barber School	Barber School
Kim Dale	Meredith	Meredith
Frank Howes	UNC - Chapel Hill	UNC - Chapel Hill
Jeff Saleeby	UNC - Chapel Hill	UNC - Chapel Hill
Emily Lou Wilson	Married	Carolina Telephone & Telegraph
Carroll Chandler	East Carolina University	East Carolina University
Ann Troutman	St. Mary's College	St. Mary's College
Rebecca Stocks	Lenoir Community College	U. S. Air Force
Harry Edwards	U. S. Air Force	U. S. Air Force

1972 Group - Control

NAME	FALL 1973	FALL 1974
Paul Timberlake	N. C. Weslyan	N. C. Weslyan
Carlton Hardy	N. C. Central University	N. C. Central University
Brenda Payton	N. C. Central University	N. C. Central University
Gary Beachum	East Carolina University	East Carolina University
Gregory Sharp	N. C. Central University	N. C. Central University
Karen Tripp	St. Andrews	UNC - Chapel Hill
Doris Sneed	Worked	Winston-Salem State
Mike Stancill	N. C. State University	N. C. State University
Charlene Edwards	Winston-Salem State Univ.	Winston-Salem State Univ.
Deborah Staton	N. C. Central University	N. C. Central University
Martha Knight	N. C. Central University	N. C. Central University
Wayne Calhoun	Atlantic Christian College	Atlantic Christian College
George Hillard	Work	Work
Michael Dixon	UNC - Chapel Hill	UNC - Chapel Hill
McCoy Williams	Virginia State University	Virginia State University
George Finklea	Atlantic Christian College	Atlantic Christian College

1973 Group - Experimental

NAME	FALL 1974
Ralph Forbes	East Carolina University
Douglas Taylor	Mechanic
Wanda Brown	East Carolina University
Jessie Murchison	Elizabeth City State University (Now working)

1973 Group - Experimental

NAME	FALL 1974
Kathy Taylor	St. Andrews
Brenda Farmer	Married, also doing office work
Willie Hawkins	East Carolina University
Ricky Teel	East Carolina University
Mike Sutton	East Carolina University
Billy Williams	Bell & Howell
Terry Elks	East Carolina University
Pam McLawhorn	East Carolina University
Louvenia Mills	Bennett College
Polly Ward	Pitt Technical Institute
James Gorham	U. S. Army
Leroy Nobles	Pitt Technical Institute
Bobby Winborn	N. C. State University
Ronnie Wooten	East Carolina University
Chariesse Jordan	N. C. Central University
Pamela Monk	Spellman College (Georgia)
Brenda Speight	Wayne Community College (Dental Assistant)
Linda Tyson	Pitt Technical Institute
Ervin Andrews	Raleigh School of Data Processing
Sterling Manning	East Carolina University
Jeffery Moore	UNC - Chapel Hill
Matt Bosley	East Carolina University
Perchista Rogers	Kings Business College

1973 Group - Experimental (Continued)

NAME	FALL 1974
Dollie Williams	Raleigh School of Data Processing
Jody Bulow	Pitt Technical Institute
Lois Smith	UNC - Chapel Hill
Keith Joyner	Madison College
David Walton	UNC - Chapel Hill then to U. S. Air Force
Raymond Fleming	Virginia State
Robert Brinkley	East Carolina University
Sarah Wilcox	Davidson
Frances Doyle	East Carolina University
Cora Foster	Virginia State
Colette Clemons	N. C. Central University

1973 Group - Control

NAME	FALL 1974
Becky Avery	Secretary
Sylvia Bryan	East Carolina University
Christine Tyson	East Carolina University
Bernadine Ward	UNC - Chapel Hill
Bill Bass	UNC - Chapel Hill
David Smith	UNC - Chapel Hill
Ricky Streeter	U. S. Army
Charles Edwards	N. C. Central University
Douglas Stokes	Atlantic Christian College
Griff Denton	UNC - Chapel Hill

1973 Group - Control

NAME	FALL 1974
Kenneth Jesnick	N. C. State University
Ricky Thorne	N. C. State University
Penny Jo Sumrell	Atlantic Christian College
Lynne Haseley	UNC - Chapel Hill
Janet Maye	N. C. A. & T.
Caffee Darden	U. S. Army
Richard Edwards	Duke University
Billy Pritchard	Massachusetts Institute of Technology
Ernest Fleming	N. C. A. & T.
Arthur Best	East Carolina University
Cindy Allen	Meredith College
Kathleen Waugh	Wellesley College (Massachusetts)
Rosalyn Jones	Howard University
Teresa Wells	UNC - Chapel Hill
Donnie Rawls	Dropped out of High School
Jeffrey Price	UNC - Chapel Hill (Morehead Scholar)
George Highsmith	U. S. Army
Sylvia Andrews	N. C. A. & T.
Peggy Braxton	Working
Kitti Nelson	UNC - Chapel Hill
Milton Tucker	N. C. A. & T.
Connie Evans	Pitt Technical Institute
George Franke	N. C. State University
Truman Haddock	N. C. State University then to East Carolina University

1973 Group - Control (Continued)

NAME	FALL 1974
John Lawrence	Work
Donna Sayce	N. C. State University
Darlene Thompson	Meredith College
Paula White	Did not graduate from high school
James Glisson	New Mexico State University
Emie Godwin	Moved to another high school to graduate

CONCLUSIONS

It appears that the objectives of this research project were accomplished. The interests and attitudes of males attending the institute were significantly changed. Although the interests and attitudes of females attending only changed slightly, they did change.

A total of eleven students or fourteen percent, from the 1972 and 1973 experimental groups did enroll at technical institutes, community colleges, or trade schools. Four students or five percent from the 1972 and 1973 control groups enrolled at technical institutes, community colleges, or trade schools. It appears that the treatment given the experimental group did have some influence on the participants' post-secondary school activities when compared to those of the control group.

From the student evaluation report and other data, the following conclusions can be stated:

1. That all the participants learned from the experience and the majority learned a great deal.

2. That the participants' perception of the vocational area changed a lot and for some, it is completely different.

3. That a majority of the participants' appreciation for the vocational area has changed.

4. That a majority of the students will discuss vocational areas with their counselor/principal more than before.

5. That sixty-six out of seventy-eight said that considering their previous vocational counseling much has been added to their knowledge of vocations.

6. That a majority of the participants feel that all students should have this experience, with thirty saying that the experience should be incorporated into all educational programs.

7. That becoming actually involved in the work of the vocational areas is far more superior than viewing motion or still pictures as a way of informing students.

8. That more students would explore the vocational areas if secondary schools provided the opportunity.

RECOMMENDATIONS

Based upon the students' evaluation, generalized comments, and the pretest - post-test results a number of recommendations have evolved:

1. That public school administrators should give attention to the actual implementation of a program whereby students can explore as many areas in the vocational category as possible, helping to reduce career mistakes and attrition.

2. That more opportunities for vocational exploration be provided for girls.

3. That as much of the public school work as feasible be oriented toward the practical aspects of the world of work.

4. That public school administrators implement inservice workshops designed to further acquaint all instructors with the world of work in general and with requirements in particular.

5. That public school administrators implement programs that are designed to aid the student in getting to know himself better and to identify more specifically his areas of interest.

6. That public school administrators restructure their programs to eliminate as much of the tracking system as possible.

7. That this research project be replicated at other institutions in order to further validate the findings.

APPENDIX A

COMMENTS FROM STUDENTS AND OTHERS

"I had no idea what vocational education meant, other than maybe agriculture or masonry. I learned that vocational training included a lot more than those two fields. Being exposed to computer technology really opened my eyes as to potential job opportunities."

Carl Turnage

As a result of her experience in the Pitt Technical Institute Computer Technology curriculum she may plan to pursue this field in college.

Ellen Heath

Feels that exposure to vocational technology training helps a person to determine his true occupational interests.

Linda Corey

Tony sees it as "getting an early start toward a job, starting with information you need immediately."

Tony Tyson

Viewed vocational-technical training as primarily carpentry and masonry before attending Pitt Technical Institute. He now thinks, "It's much broader than I thought; for those individuals who could not afford financially to go to college and or did not want to go, they can, after vocational training, earn as much in many instances as the four-year college graduates."

Bob Hines

"From the comments I have heard from our students, their exposure to vocational technology education has been very rewarding to them. They have been quite excited and enthusiastic about what they have learned and their experiences."

Mr. Russ Cotten
Principal
Farmville Central

Before I attended the summer project at Pitt Tech I felt that the school was absolutely the last resort for me. I thought that Pitt Tech was a school for people who were not smart enough to continue on to college. A person could go there to learn to grease a car or learn to type. I felt that they taught you how to work for other people.

After completing the project I have changed my mind in many ways. I still want to get my four-year education and I don't know that I would go to Pitt Tech if I could not go to college. I did learn that Pitt Tech is for all kinds of people, smart or not too smart, and they supply you with the training and education you need to get a good job. You may have to start at the bottonm but whether you stay there will depend on your willingness to use what you have learned and to accept your responsibilities.

Someday I would like to see the technical schools and the colleges of our state work together. I don't feel that they are actually that far apart. I am not ready to be seen wearing a Pitt Tech T-shirt or riding around town with a Pitt Tech sticker on my car, but I have changed my opinions on the technical training available in our state.

Mickey Harris

Regarding the experience that I received this summer while attending the Pitt Technical Institute, I would like to share a few of my views about the program in which I participated.

My experience at Pitt Tech was a very challenging one. I entered the program with no knowledge of what a Technical School was like. As the days went by, I began to really get a good picture of the technical school. I really liked it. I realized that a small, convenient technical school could be very helpful for those not able to acquire a four-year education. I feel that if my mind was not set upon entering a four-year college I would definitely go to a technical school. I was almost persuaded anyway. Pitt Technical School is really a fine school.

The course in which I found the most interest was electronics. I think that this field is very well taught and that the Institute has the supplies to carry on a good electronics class.

I also found that the faculty at the Institute was much closer to the student body than I feel would occur in a university. Usually, when this occurs, there is a good relationship going on. I think this experience should be continued by other programs, and who knows, the technical school might be crowded.

Earl Jerry Griffin

Me, go to a technical school--now, that's for "them", not for me. This is what I used to tell people when they suggested technical school to me. My impression of these types of schools were for people whose ability wasn't high enough for college. This is what many people think today!

But after my four weeks at Pitt Tech I was able to see for myself what a technical school is like. I wasn't just told and given pictures, etc. I was able to see for myself. My eyes told exactly what they saw. They relayed to me that people were learning to better themselves--and isn't that what colleges are supposed to do? The technical schools of today have a lot to offer students "gifted" or not.

Sherrian Brown

I really enjoyed going to Pitt Tech this past summer for three important reasons. First of all, it let me decide about just what exactly I did want to do in the future. The second reason is that I found out what exactly Pitt Tech had to offer. It is really a good place to go. Third reason is that everybody got to meet different people that we didn't know.

June Whitley

Before I went to Pitt Tech I thought the place was for brick masons or people who could not make it in college. The people there seemed ignorant acting.

Since I have gone to Pitt Tech my whole idea of the place has changed. The people at Pitt Tech are real cool. Everybody there is interested in an education. Pitt Tech has courses which are better than most colleges. The Data Processing and Electronics are some of the best courses at Pitt Tech. The students there are not ignorant, most of them are college-bound students.

Horace Tripp

Before I went to the program at Pitt Technical Institute I thought it was a school for people who weren't qualified to go to a four-year college or for people who didn't graduate from high school to go and get their equivalency certificate. It seemed an overall uncouth place for me to attend after I graduated from high school.

After I had attended the program I felt I had learned more than I thought I would. Some courses I audited totally surprised me. Some of the people there were more than qualified to attend a four-year college. My attitude has changed, but not enough to swerve

me from a four-year college. If I should fail there I would attend Pitt Technical Institute and take a course in Architectural Drafting. I thoroughly enjoyed the program.

Ray Eubanks

Before my four weeks at Pitt Tech this summer I really didn't think too much of it. I thought it was a school for people who lacked the money and intelligence to attend a college. But that just goes to prove that you should investigate a matter before passing judgment upon it.

I found the teachers to be interested and dedicated to their students and their job.

The Mental Health and Practical Nursing departments were just fantastic. The students in both departments were so enthused in their work. I talked with many of them and found them all to be so happy and pleased with their studies.

My short nine days with John Childers and Maggie French in the Mental Health Department were some of the most rewarding days in my life. I enjoyed and treasure every moment I spent with them, for they not only taught, but showed me many things that have helped me to decide what to do with my future. They have helped me to learn many things about others, but especially many things about myself.

I shall always treasure and value the time I spent at Pitt Tech. I just wish everyone in my class could have shared it.

I think it is a commendable project and will prove rewarding to any student fortunate enough to participate.

Jessica Fleming

Before I attended Pitt Technical Institute this summer I thought it was just a school for high school dropouts or for people who couldn't make it in a four-year college or university.

After observing this school for four weeks I see that I understood only a small fraction of the school's function. Pitt Tech does offer an education for students who didn't graduate from high school and it teaches them a trade that they can use to earn a living. It also helps them to find a job once they graduate. Not only does it do this, but is also takes many of East Carolina's transfers. A technical training is in demand for many jobs today and Pitt Tech offers this training. After completing two years at Pitt Tech a student can attend East Carolina for two years and get four-year college credit. For students who

can't afford a four-year school Pitt Tech offers valuable training in two years. Many students attend a four-year school actually wanting the technical training offered by an institute such as Pitt Tech, but are unaware of its advantages for them. Pitt Tech is valuable to our community, but its purposes and advantages are not known to the community.

Wanda Wheless

APPENDIX B

Benefits Derived From The Research Project

Benefits for the Students

1. The students' technical and vocational perspectives have been broadened.
2. These students now have some additional inputs which will be of value in deciding their future endeavors in education.
3. Students from the city and county schools have come together and participated jointly in a project.

Benefits for the Public Schools

1. Student evaluations indicate that schools should provide more opportunity for all students to explore.
2. Students from the county and city administrative systems have come together.
3. Administrators and counselors from both administrative systems have come together to help carry out a project.

Benefits for Pitt Technical Institute

1. Pitt Tech has been exposed to and evaluated by seventy-eight top-level high school students.
2. Pitt Tech has brought together the administration and a group of students from the two administrative units to assist in carrying out a research project.
3. Pitt Tech's image, as well as that of technical and vocational education, has been improved.
4. The students that participated are leaders in their schools and community, and we have heard many good comments made by parents and other students.
5. For some of the principals and counselors, their visit concerning the project was the first time they had been on Pitt Tech's campus.
6. Excellent coverage by the news media has again placed Pitt Tech before the public eye.

APPENDIX C

LETTERS OF ENDORSEMENT

Greenville City Schools
431 West Fifth Street
P. O. Box 1009
Greenville, North Carolina 27834
September 27, 1972

Dr. Ben Fountain
Department of Community Colleges
North Carolina Board of Education
Raleigh, North Carolina

Dear Dr. Fountain:

It is my sincere hope that Pitt Technical Institute can obtain refunding for the vocational educational project which involved some of our high school youth during the past summer. All evaluations have been positive and there is strong evidence that the objectives of the project were met with success.

This indepth exposure to vocation has proven most valuable to high school students and serves to extend and expand what we are trying to do in the public schools. A continuation of the project in order to provide this service to youngsters and to validate the results over a longer period of time is much to be desired. It is my sincere hope that you share these feelings and will lend the influence of your office to renewed funding of the project for the coming year.

Sincerely,

Cleet C. Cleetwood
Superintendent

Pitt County Board of Education
Greenville, North Carolina 27834
September 25, 1972

Dr. Ben Fountain
Department of Community Colleges
Raleigh, North Carolina

Dear Dr. Fountain:

We congratulate Pitt Technical Institute for the program carried out this summer with forty academically outstanding students from Pitt County. Our feedback from the students is that the program was carefully planned and implemented. Further the students feel it has made a real difference in the way they view the world of work and training for vocations.

We hope that such a program may be set up on a continuing basis and pledge our full support should it be.

Yours truly,

Arthur S. Alford
Superintendent
Pitt County Schools

Pitt County Board of Education
Greenville, North Carolina 27834
August 8, 1972

Mr. Ed Warren
Pitt Technical Institute
Greenville, North Carolina

Dear Mr. Warren:

Please let me express my appreciation personally, and that of Pitt County Schools, for allowing us to be a part of the research project on attitudes toward vocational training. I have spoken with several of the students and they all feel the four weeks really "broadened horizons" for them. I shall watch with interest your final research on the group of forty students.

This leads me to wonder what ways we might cooperate for further summer programs for many good students who are looking for something to do in the summer, but don't feel they have the funds to go away to some of the programs available. Perhaps we could explore this before the new school year gets too far gone.

Thank you again for allowing us to be involved and for your splendid cooperation and planning.

Yours truly,

Katheryn Lewis
Director of Pupil Personnel Services
Pitt County Schools